Listing of the Claims:

1. (Previously Presented) A method of providing improved quality of service over a series of messages exchanged between computers in a networking environment that are related to a transaction, comprising:

determining one or more transactional quality of service ("TQoS") values to be applied to the related messages;

using the determined TQoS values when transmitting at least one of the related messages from a server computer to a client computer as a response message related to a request message from the client computer;

annotating a routing token of the response message with information reflecting the determined TQoS values;

transmitting the response message with the annotated routing token with the information reflecting the determined TQoS values from the server computer to the client computer;

receiving the response message transmitted with the annotated routing token-at the client computer; and

transmitting the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server.

2. (Previously Presented) The method according to claim 1, wherein one of the TQoS values is a transmission priority value to be used when transmitting the annotated routing token from the server computer to the client computer.

3. (Previously Presented) The method according to claim 1, wherein one of the TQoS values is available bandwidth information pertaining to a network connection to the client computer.

4. (Previously Presented) The method according to claim 1, further

comprising storing the determined TQoS values for use when transmitting subsequent related response messages to the client computer.

5. (Canceled).

6. (Previously Presented) The method according to claim 1, wherein:

the annotated routing token transmitted from the server computer to the client computer comprises an object reference that is annotated to carry the TQoS values; and

transmitting the TQoS values from the client computer to the server computer with subsequent related request messages comprises automatically returning the TQoS values to the server computer with subsequent related request messages based on the annotation of the object reference in the related response message that is received from the server computer.

7. (Previously Presented) The method according to claim 1, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer.

8. (Previously Presented) The method according to claim 1, wherein at least one of the request messages transmitted with the determined TQoS values is a request from the client computer for a Web page.

9. (Previously Presented) The method according to claim 1, wherein at least one of the request messages transmitted with the determined TQoS values is a request from the client computer for a Web object.

10. (Previously Presented) The method according to claim 1, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer and wherein at least one of the

subsequent related request messages is a request for information referenced by the Web page.

11. (Previously Presented) The method according to claim 1, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer and wherein at least one of the subsequent related request messages is a request for information selected from the Web page by a user of the client computer.

12. (Previously Presented) The method according to claim 1, wherein using the determined TQoS values when transmitting at least one of the related messages from a server computer to a client computer as a response message related to a request message from the client computer further comprises using the determined TQoS values to set markings in a network layer header of the response messages transmitted with the annotated routing token.

13. (Previously Presented) The method according to claim 3, further comprising enforcing bandwidth allocation using the available bandwidth information as the at least one transmitted message is transmitted through the networking environment.

14. (Previously Presented) The method according to claim 2, further comprising using the transmission priority value to prioritize the transmission of the at least one transmitted message through the networking environment.

15. (Previously Presented) The method according to claim 4, wherein storing the determined TQoS values for use when transmitting subsequent related response messages to the client computer comprises storing the determined TQoS values in a server computer.

16. (Canceled).

17. (Previously Presented) The method according to claim 1, wherein the annotated routing token is used to modify a Uniform Resource Locator from a header of selected ones of the related messages.

18. (Previously Presented) The method according to claim 17, wherein the annotated routing token further comprises information enabling identification of the client computer and another computer which performs the transmitting, as well as identification of a cookie on the client computer used to store the determined TQOS values for the related messages.

19. (Previously Presented) A system for providing improved quality of service over a series of messages exchanged between computers in a networking environment that are related to a transaction, comprising:

means for determining one or more transactional quality of service ("TQoS") values to be applied to the related messages;

means for using the determined TQoS values when transmitting at least one of the related messages from a server computer to a client computer as a response message related to a request message from the client computer;

means for annotating a routing token of the response message with information reflecting the determined TQoS values;

means for transmitting the response message with the annotated routing token with the information reflecting the determined TQoS values from the server computer to the client computer;

means for receiving the response message transmitted with the annotated routing token at the client computer; and

means for transmitting the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server computer.

20. (Previously Presented) The system according to claim 19, wherein the TQoS values comprise one or more of (1) a transmission priority value to be used when transmitting the annotated messages and (2) available bandwidth information pertaining to a network connection to the client computer.

21. (Previously Presented) The system according to claim 19, further comprising means for storing the determined TQoS values for use when transmitting subsequent related response messages to the client computer.

22. (Canceled).

23. (Previously Presented) The system according to claim 19, wherein the annotated routing token transmitted from the server computer to the client computer comprises an object reference that is annotated to carry the TQoS values, and wherein the means for transmitting the TQoS values from the client computer to the server computer with subsequent related request messages is configured to automatically return the TQoS values to the server computer with subsequent related request messages based on the annotation of the object reference in the related response message that is received from the server computer.

24. (Previously Presented) The system according to claim 19, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer, a request from the client computer for a Web page, or a request from the client computer for a Web object.

25. (Previously Presented) The system according to claim 19, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer and wherein at least one of the subsequent related request messages is a request for information referenced by the

Web page.

26. (Previously Presented) The system according to claim 19, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer and wherein at least one of the subsequent related request messages is a request for information selected from the served Web page by a user of the client computer.

27. (Previously Presented) The system according to claim 19, wherein the means for using the determined TQoS values further comprises using the determined TQoS values to set markings in a network layer header of the response messages transmitted with the annotated routing token.

28. (Original) The system according to claim 20, further comprising means for enforcing bandwidth allocation using the available bandwidth information as the at least one transmitted message is transmitted through the networking environment.

29. (Original) The system according to claim 20, further comprising means for using the transmission priority value to prioritize the transmission of the at least one transmitted message through the networking environment.

30. (Original) The system according to claim 21, wherein the means for storing stores the determined TQoS values in a server computer.

31. (Canceled).

32. (Previously Presented) The system according to claim 19, wherein the annotated routing token is used to modify a Uniform Resource Locator from a header of selected ones of the related messages.

33. (Previously Presented) The system according to claim 32, wherein the annotated routing token further comprises information enabling identification of the client computer and another computer which performs the means for transmitting, as well as identification of a cookie on the client computer used to store the determined TQoS values for the related messages.

34. (Previously Presented) The system according to claim 19, wherein:

the TQoS values comprise at least (1) a transmission priority value to be used when transmitting the response messages with the annotated routing token and (2) available bandwidth information pertaining to a network connection to the client computer;

at least one of the response messages transmitted with the annotated routing token is a response that serves a Web object to the client computer from a network cache; and

the means for using the determined TQoS values further comprises means for using the determined TQoS values, by the network cache, to prioritize transmission of the response that serves the Web object and to enforce bandwidth allocation using the available bandwidth information as the response is transmitted.

35-36. (Canceled).

37. (Previously Presented) A computer program product for providing improved quality of service over a series of messages exchanged between computers in a networking environment that are related to a transaction, the computer program product embodied on one or more computer-readable media and comprising:

computer-readable program code that is configured to determine one or more transactional quality of service ("TQoS") values to be applied to the related messages;

computer-readable program code that is configured to use the determined TQoS values when transmitting at least one of the related messages from a server

computer to a client computer as a response message related to a request message from the client computer;

computer-readable program code that is configured to annotate a routing token of the response message with information reflecting the determined TQoS values;

computer-readable program code that is configured to transmit the response message with the annotated routing token with the information reflecting the determined TQoS values from a server computer to the client computer;

computer-readable program code that is configured to receive the response message transmitted with the annotated routing token at the client computer; and

computer-readable program code that is configured to transmit the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server.

38. (Previously Presented) The computer program product according to claim 37, wherein the TQoS values comprise one or more of (1) a transmission priority value to be used when transmitting the response messages with the annotated routing token and (2) available bandwidth information pertaining to a network connection to the client computer.

39. (Previously Presented) The computer program product according to claim 37, further comprising computer-readable program code that is configured to store the determined TQoS values for use when transmitting subsequent related response messages to the client computer.

40. (Canceled).

41. (Previously Presented) The computer program product according to claim 37, wherein the response messages transmitted with the annotated routing token from the server computer to the client computer include an object reference that is

annotated to carry the TQoS values, and wherein the computer-readable program code that is configured to transmit the TQoS values from the client computer to the server computer with subsequent related request messages is configured to automatically return the TQoS values to the server computer with subsequent related request messages based on the annotation of the object reference in a related response message that is received from the server computer.

42. (Previously Presented) The computer program product according to claim 37, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer, a request from the client computer for a Web page, or a request from the client computer for a Web object.

43. (Previously Presented) The computer program product according to claim 37, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer and wherein at least one of the subsequent related request messages is a request for information referenced by the Web page.

44. (Previously Presented) The computer program product according to claim 37, wherein at least one of the response messages transmitted with the annotated routing token is a response that serves a Web page to the client computer and wherein at least one of the subsequent related request messages is a request for information selected from the served Web page by a user of the client computer.

45. (Previously Presented) The computer program product according to claim 37, wherein the computer-readable program code that is configured to use the determined TQoS values is further configured to use the determined TQoS values to set markings in a network layer header of the response messages transmitted with the annotated routing token.

46. (Previously Presented) The computer program product according to claim 38, further comprising computer-readable program code that is configured to enforce bandwidth allocation using the available bandwidth information as the at least one transmitted message is transmitted through the networking environment.

47. (Previously Presented) The computer program product according to claim 38, further comprising computer-readable program code that is configured to use the transmission priority value to prioritize the transmission of the at least one transmitted message through the networking environment.

48. (Previously Presented) The computer program product according to claim 39, wherein the computer-readable program code that is configured to store the determined TQoS values in a server computer.

49. (Canceled).

50. (Previously Presented) The computer program product according to claim 37, wherein the annotated routing token is used to modify a Uniform Resource Locator from a header of selected ones of the related messages.

51. (Previously Presented) The computer program product according to claim 50, wherein the annotated routing token further comprises information enabling identification of the client computer and another computer which performs the computer-readable program code that is configured to transmit, as well as identification of a cookie on the client computer used to store the determined TQoS values for the related request messages.

52. (Previously Presented) The method according to claim 1, further comprising storing the TQoS values as one or more cookies on the client computer.

53. (Previously Presented) The method according to claim 52, wherein transmitting the TQoS values from the client computer to the server computer with subsequent related request messages comprises determining the TQoS values to be transmitted from the client computer based on the stored one or more cookies on the client computer.

54. (Previously Presented) The system according to claim 19, further comprising means for storing the TQoS values received at the client computer as one or more cookies on the client computer.

55. (Previously Presented) The system according to claim 54, wherein the means for transmitting the TQoS values from the client computer to the server computer with subsequent related request messages comprises means for determining the TQoS values to be transmitted from the client computer based on the stored one or more cookies on the client computer.

56. (Previously Presented) The computer program product according to claim 37, further comprising computer-readable program code that is configured to store the TQoS values that are received at the client computer as one or more cookies on the client computer.

57. (Previously Presented) The computer program product according to claim 56, wherein the computer-readable program code that is configured to transmit the TQoS values from the client computer to the server computer with subsequent related request messages is further configured to determine the TQoS values to be transmitted from the client computer based on the stored one or more cookies on the client computer.